

## COMMUNIQUE SYSTEM WITH DYNAMIC BANDWIDTH ALLOCATION IN CELLULAR COMMUNICATION NETWORKS

### Abstract

5       The commune system for cellular communication networks operates with  
existing cellular communication networks to provide commune communication  
services to subscribers. The commune can be unidirectional (broadcast) or  
bidirectional (interactive) in nature and the extent of the commune can be network-  
wide broadcast or narrowcast, where one or more cells and/or cell sectors are grouped  
10   to cover a predetermined geographic area or demographic population or subscriber  
interest group to transmit information to subscribers who populate the target audience  
for the narrowcast transmissions. The commune system for cellular communication  
networks can dynamically allocate the available bandwidth to thereby serve subscribers  
with more control channel(s) and/or control channel bandwidth and/or communication  
5   channels and/or communication channels of greater bandwidth as the need presents  
itself. The dynamic bandwidth allocation can simultaneously occur in multiple domains:  
time, code, frequency to thereby serve the needs of the subscribers to receive  
Communes. The content of these transmissions can be multi-media in nature and  
comprising a combination of various forms of media: audio, video, graphics, text, data  
and the like. The subscriber terminal devices used to communicate with the commune  
20   system for cellular communication networks are typically full function communication  
devices that include: WAP enabled cellular telephones, personal digital assistants, Palm  
Pilots, personal computers, and the like or special commune only communication  
devices that are specific to commune reception; or MP3 audio players (essentially a  
radio receiver or commune radio); or an MPEG4 video receiver (commune TV); or  
25   other such specialized communication device.